IN THE SPECIFICATION:

The paragraph bridging pages 5 and 6, please amend as follows:

Figure 3 shows the processing of the storage of the template image and judgment of the appropriateness of this image. First, in a state in which the operator has matched the pointer with the position coordinates [[(N, M)]] (N_1, M_1), which represent an arbitrary point on the image of the semiconductor chip 14a that has been acquired beforehand by the camera 7 and displayed on the monitor 39, an image of the area displayed on the monitor 39 is stored in the data memory 36 as a template image by using the manual input means 33 to input a setting signal (e.g., by indicating the direction using a mouse, and pressing the setting switch of the mouse) (S102).

Page 6, first full paragraph, please amend as follows:

Next, using the stored template image, self-correlation values R_0 are calculated for respective pixels within specified ranges in the X and Y directions centered on the coordinates [[(N, M])]] (N_1, M_1), i.e., within the ranges of ~~$X - P < X < X + P$, $Y - Q < Y < Y + Q$~~ $X_1 - P < X_1 < X_1 + P$, $Y_1 - Q < Y_1 < Y_1 + Q$. Furthermore, the amount of coincidence S is calculated based upon the range in which self-correlation values can be sought ($-1 \leq R_0 \leq 1$). In this way, a self-correlation curve which is the curve formed by the values of the amount of coincidence S, is determined; and this curve is stored in the data memory 36 (S104).

Page 6, last full paragraph, please amend as follows:

First, the amounts of coincidence S0 and S1 for the coordinates ~~(N + A, M)~~ $(N_1 + A, M_1)$ and the coordinates ~~(N - A, M)~~ $(N_1 - A, M_1)$ are read out from the data memory 36 (S106).

Page 8, first full paragraph, please amend as follows:

First, the amounts of coincidence S2 and S3 for the coordinates ~~(N, M+B)~~ (N_1, M_1+B) and the coordinates ~~(N, M-B)~~ (N_1, M_1-B) are read out from the data memory 36 (S112).

Page 9, first full paragraph, please amend as follows:

Next, using the previously registered template image, the inputted image is searched, and a candidate point [[(X, Y)]] (X_1, Y_1) for the position of coincidence is determined (S202). The search of this inputted image is accomplished by the same method as in

conventional pattern matching, e.g., by calculating a correlation value R1 of the template image and inputted image for each pixel within the area of the inputted image using a numerical formula for a normalized correlation similar to the Numerical Expression 1 (however, the self-correlation value R_0 in Numerical Expression 1 is replaced by the correlation value R1), and calculating the amount of coincidence S based upon the range of values that can be adopted by the correlation value R1 ($-1 \leq R1 \leq 1$). The point where the calculated amount of coincidence S shows a maximum value is the candidate point.

Page 9, second full paragraph, please amend as follows:

Next, a judgment is made as to whether or not the amount of coincidence SC for this candidate point ~~[[(X, Y)]]~~ (X_1, Y_1) is smaller than a specified reference value SL (S204). Pints where the amount of coincidence SC is excessively low are extremely unlikely to be the position of coincidence even if such points are points where a maximum value is shown; accordingly, the judgment excludes such points from candidacy. Furthermore, the reference value SL used here is a value similar to the threshold value used in conventional pattern matching, e.g., a value of 50%.

Page 10, first full paragraph, please amend as follows:

First, the amount of coincidence S0 between the template image and the inputted image is calculated for the coordinates ~~(X + A, Y)~~ $(X_1 + A, Y_1)$ (S206). Next, this amount of coincidence S0 is compared with the threshold value Sx (S208), and an affirmative is obtained if S0 is less than the threshold value Sx.

Page 10, second full paragraph, please amend as follows:

Next, the amount of coincidence S1 between the template image and the inputted image is calculated for the coordinates ~~(X – A, Y)~~ $(X_1 - A, Y_1)$ (S210). Then, this amount of coincidence S1 is compared with the threshold value Sx (S212), and an affirmative is obtained if S1 is less than the threshold value Sx.

Page 10, third full paragraph, please amend as follows:

Next, the amount of coincidence S2 between the template image and the inputted image is calculated for the coordinates ~~(X, Y + B)~~ $(X_1, Y_1 + B)$ (S214). Then, this amount of coincidence S2 is compared with the threshold value Sy (S216), and an affirmative is obtained if S2 is less than the threshold value Sy.

Page 10, fourth full paragraph, please amend as follows:

Next, the amount of coincidence S3 between the template image and the inputted image is calculated for the coordinates ~~(X, Y – B)~~ $(X_1, Y_1 - B)$ (S218). Then, this amount of coincidence S3 is compared with the threshold value Sy (S220), and an affirmative is obtained if S3 is less than the threshold value Sy.

Page 10, fifth full paragraph, please amend as follows:

Then, in the case of a yes in all of the steps S208, S212, S216 and S220, the candidate point [[(X, Y)]] (X_1, Y_1) is judged to be the position of coincidence, and is stored in the data memory 36 as processing in the case of satisfactory recognition (S222).

Paragraph bridging pages 11 and 12, please amend as follows:

Also, in the above-described embodiments, a self-correlation curve is determined beforehand (S104), and the amounts of coincidence S at respective points on this self-correlation curve are read out (S106, S112). However, instead of such a structure, it is also possible that only the amounts of coincidence S0, S1, S2 and S3 for the coordinates ~~(N + A, M)~~ $(N_1 + A, M_1)$, ~~(N – A, M)~~ $(N_1 - A, M_1)$, ~~(N, M + B)~~ $(N_1, M_1 + B)$ and ~~(N, M – B)~~ $(N_1, M_1 - B)$ are calculated in a pinpoint manner, instead of determining a self-correlation curve for all of the pixels in the area surround the coordinates [[(N, M)]] (N_1, M_1).

Page 12, first full paragraph, please amend as follows:

However, when the amount of coincidence S is thus calculated in a pinpoint manner for the coordinates of four points, there is a possibility of erroneous judgment as satisfactory, even if the template image is unsuitable, in the case of a long pattern oriented at an oblique angle to the X and Y directions as shown in Figure 6. Such a long pattern oriented at an oblique angle is not commonly used in the semiconductor field. However, in order to prevent such erroneous judgments, such a structure can be used that the amount of coincidence is calculated for each pixel in a loop-form area surrounding the coordinates [[(N, M)]] (N_1, M_1) (in Figure 7, this is the area of the pixels connected to each other by the dotted line), the maximum value of these amounts of coincidence (e.g., in the case of a pad, the maximum value among S49 through S76 calculated for the pixels of the outermost circumference in Figure 7; in the case of a lead, the maximum values of the amounts of coincidence S calculated for each pixel in a loop-form area located even further to the outside (not shown)) is compared with the reference value

K1 in step S108, and the minimum value of these amounts of coincidence (the minimum value among S1 through S8 calculated for the eight pixels surrounding the central pixel in Figure 7) is compared with the reference value K in step S110. Furthermore, besides being rectangular, the shape of the loop formed by the pixels may also be a shape that is close to round.